

CLAIMS:

1. A screed mold method for making gelatinous elastomer gel cushioning articles, the method comprising the steps of:

obtaining a screed mold,

the screed mold havign a rigid body,

the screed mold being an open face mold,

the screed mold having a honeycomb shape in said rigid body in which gel may be formed to take on a desired geometric structure,

the screed mold including a plurality of criscrossing slots in said rigid body to form said honeycomb shape which estabishes a mold core,

obtaiing side rails,

attaching side rails to the perimeter of the mold in order to surround the perimeter of the mold with side rails,

obtaining access to an injection head,

said injection head having a plurality of distribution channels therein through which thermoplastic material may flow,

said distribution channels being subdivided into sub-distribution channels,

said distribution channels terminating in exit ports through which thermoplastic material may exit said injection head and enter said screed mold,

said injection head including at least one heating element within it for heating thermoplastic material,

positioning said injection head adjacent said screed mold in a location so that thermoplastic material may flow from said injection head distribution channels out of said exit ports and into said screed mold slots,

accessing a pumping source,

utilizing said pumping source to pressurize thermoplastic material and force it into said injection head, through said distribution channels of said injection head, out of said exit ports of said injection head, into said screed mold, through said slots in said screed mold and out of said screed mold,

recovering molded thermoplastic material from said screed mold in a desired geometric shape of a cushioning element.

2. A method as recited in claim 1 wherein said recovering step includes periodically terminating pumping of thermoplastic material into said screed mold, and during such period of termination, removing molded thermoplastic material from said screed mold.

3. A method as recited in claim 1 wherein said pumping is a continuous process, and molded thermoplastic material is recovered from said screed mold as unmolded thermoplastic material is forced into said screed mold.

4. A method as recited in claim 1 wherein molded thermoplastic material is recovered from said screed mold by cutting it as it exits said screed mold due to new thermoplastic material being forced into said screed mold.

5. A method as recited in claim 1 wherein at least some of said slots are cut not more than 80% of the way through said rigid body.
6. A method as recited in claim 1 wherein at least some of said slots are cut all the way through said rigid body.
7. A method as recited in claim 1 wherein said rigid body is metallic.
8. A method as recited in claim 1 wherein said rigid body is non-metallic.
9. A method as recited in claim 1 wherein at least some of said slots cross each other in an "X" configuration.
10. A method as recited in claim 1 wherein at least some of said slots cross each other in a "+" configuration.
11. A method as recited in claim 1 wherein said slots are sized to permit thermoplastic material to flow therethrough when heated.
12. A method as recited in claim 1 further comprising at least one cooling channel in said distribution head.

13. A method as recited in claim 1 further comprising the step of establishing a desired distance between said distribution head and said screed mold prior to flow of thermoplastic material.

14. A method as recited in claim 1 wherein said thermoplastic material includes an A-B-A triblock copolymer.

15. A method as recited in claim 14 wherein said thermoplastic material includes a plasticizer.

16. A screed mold method for making gelatinous elastomer gel cushioning articles, the method comprising the steps of:

obtaining a screed mold,

the screed mold having a rigid body,

the screed mold being an open face mold,

the screed mold having a structural shape in said rigid body in which gel may be formed to take on a desired geometric structure, said structural shape including slots in said rigid body,

obtaining access to an injection head,

said injection head having a plurality of distribution channels therein through which thermoplastic material may flow,

said distribution channels terminating in exit ports through which thermoplastic material may exit said injection head and enter said screed mold,

accessing a pumping source,

utilizing said pumping source to pressurize thermoplastic material and force it into said injection head, through said distribution channels of said injection head, out of said exit ports of said injection head, into said screed mold, through said slots in said screed mold and out of said screed mold, and

receiving a cushioning element molded by said screed mold:

16. A method as recited in claim 15 wherein said receiving step includes periodically terminating pumping of thermoplastic material into said screed mold, and during such period of termination, removing molded thermoplastic material from said screed mold.

17. A method as recited in claim 15 wherein said pumping is a continuous process, and molded thermoplastic material is recovered from said screed mold as unmolded thermoplastic material is forced into said screed mold.

18. A method as recited in claim 15 wherein molded thermoplastic material is recovered from said screed mold by cutting it as it exits said screed mold due to new thermoplastic material being forced into said screed mold.

19. A method as recited in claim 15 wherein at least some of said slots are cut not more than 80% of the way through said rigid body.

20. A method as recited in claim 15 wherein at least some of said slots are cut all the way through said rigid body.
21. A method as recited in claim 15 wherein said rigid body is metallic.
22. A method as recited in claim 15 wherein said rigid body is non-metallic.
23. A method as recited in claim 15 wherein at least some of said slots cross each other in an "X" configuration.
24. A method as recited in claim 15 wherein at least some of said slots cross each other in a "+" configuration.
25. A method as recited in claim 15 wherein said slots are sized to permit thermoplastic material to flow therethrough when heated.
26. A method as recited in claim 15 further comprising at least one cooling channel in said distribution head.
27. A method as recited in claim 15 further comprising the step of establishing a desired distance between said distribution head and said screed mold prior to flow of thermoplastic material.

28. A method as recited in claim 15 wherein said thermoplastic material includes an A-B-A triblock copolymer.

29. A method as recited in claim 16 wherein said thermoplastic material includes a plasticizer.